Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A high purity Nb sputtering target for forming a Nb liner film of an Al interconnection film having a resistivity of 4 μΩcm or less, the high purity Nb sputtering target containing an amount of Ta and an amount of oxygen as impurities dispersed therein, the amount of Ta in the target being in a range of 550 to 3000 ppm, the amount of oxygen in the target being in a range of 10 to 200 ppm, wherein a dispersion of the Ta content in the target is within 30% , and a dispersion of the oxygen content in the target is within 80%, the dispersion of the Ta content and the dispersion of the oxygen content being respectively defined by the following equation, for respective measured content values of 9 specimens sampled at respective predetermined positions in the target:

dispersion (%) = {(maximum value - minimum value) / (maximum value + minimum value)} X 100

wherein an average grain diameter of Nb in the high purity Nb sputtering target is 100 μm or less, each grain of the Nb grains has a grain diameter in the range of 0.1 to 10 times an average grain diameter, and a grain size ratio of adjacent grains is in the range of 0.1 to 10,

wherein the high purity Nb target is formed by melting due to multiple times of EB melting so as to reduce the Ta content and oxygen content and the dispersion in a Nb ingot and by plastic working the Nb ingot with a working rate in a range of 50 to 98% and by heat-treating at a temperature in a range of 800 to 1300°C for one hour or more, and

wherein the sputtering target is bonded with a backing plate made of Al or an Al alloy by hot-pressing at a temperature in a range of 400 to 600°C.

2. (Cancelled).

3. (Previously Presented) The sputtering target as set forth in claim 1: wherein the Ta content is in a range of 550 to 1000 ppm.

4. - 7. (Cancelled).

8. (Currently Amended) The sputtering target as set forth in claim [7] 1 wherein the sputtering target and the backing plate are diffusion bonded.

9. (Cancelled).

10. (Previously Presented) The sputtering target as set forth in claim 1, the grain size ratio of adjacent grains is in the range of 0.5 to 5, and a dispersion of the grain size ratio of adjacent grains is within 30% the dispersion being defined by the following equation, for respective measured values of 9 specimens samples at respective predetermined positions in the target:

dispersion (%) = {(maximum value - minimum value) / (maximum value + minimum value)} X 100.

11. - 19. (Cancelled).

20. (Previously Presented) The sputtering target as set forth in claim 10; wherein the oxygen content is in the range of 10 to 100 ppm.

21.-23. (Cancelled).

24. (Currently Amended) A high purity Nb sputtering target consisting essentially of Nb for forming a Nb liner film of an Al interconnection film in applying dual damascene interconnection technology, the sputtering target being bonded with a backing plate made of Al or an Al alloy by hot-pressing at a temperature in a range of 400 to 600°C, wherein the target contains an amount of Ta impurity dispersed therein, the amount of Ta in the target being in a range of 550 to 3000 ppm, and a dispersion of the Ta content in the target being within 30%, wherein the dispersion of the Ta content is defined by the following equation, for respective measured content values of 9 specimens sampled at respective predetermined positions in the target:

dispersion (%) = {(maximum value - minimum value) / (maximum value + minimum value)} X 100, wherein a resistivity of the Al interconnection film is 4 μΩcm or less.

25. (Currently Amended) A high purity Nb sputtering target consisting essentially of Nb for forming a Nb liner film of an Al interconnection him in applying dual damascene

interconnection technology, the sputtering target being bonded with a backing plate made of Al or an Al alloy by hot-pressing at a temperature in a range of 400 to 600°C, wherein the target contains an amount of oxygen as an impurity, the amount of oxygen in the target being in a range of 10 to 200 ppm, and a dispersion of the oxygen content in the target being within 80%, wherein the dispersion of the oxygen content is defined by the following equation, for respective measured content values of 9 specimens sampled at respective predetermined positions in the target:

dispersion (%) = {(maximum value - minimum value) / (maximum value + minimum value)} X 100, wherein a resistivity of the Al interconnection film is 4 μΩcm or less.

26. (Cancelled).

27. (Currently Amended) A high purity Nb sputtering target consisting essentially of Nb for forming a Nb liner film of an Al interconnection film in applying dual damascene interconnection technology, the sputtering target being bonded with a backing plate made of Al or an Al alloy by hot-pressing at a temperature in a range of 400 to 600°C, wherein the high purity Nb target has a recrystallized structure formed by heat-treating a high purity Nb plate at a temperature of 800 to 1300°C for one hour or more, in which an average grain diameter of Nb is 100 μm or less, each grain of the Nb has a grain diameter in the range of 0.1 to 10 times an average diameter, and a grain size ratio of adjacent grains is in the range of 0.1 to 10, wherein a resistivity of the Al interconnection film is 4 μΩcm or less.

28. (Previously Presented) The high purity Nb sputtering target as set forth in claim 27, wherein the high purity Nb plate is formed by plastic working a Nb ingot at a working rate of 55% to 95%.

29. (Currently Amended) An Al interconnection film having a dual damascene structure, comprising:

a Nb liner film formed by sputtering a high purity Nb sputtering target of claim 1; and

an Al film formed on the Nb liner film, wherein a resistivity of the Al interconnection film is 4 μΩcm or less.